



**Application for Certification as an Eligible Energy Resource Under the  
Delaware Renewable Energy Portfolio Standard**

1. Name of Generation Unit<sup>1</sup>

Collender Residence

2. Generation Unit Address

8 High Ridge Ct.  
Newark, DE 19711

2a. Is the Generation Unit located within the PJM control area?

☒ Yes ☐ No

2b. If No, does the Generation Unit have capabilities to be imported into PJM?<sup>23</sup>

☐ Yes ☐ No

2b1. Include NERC Tags (if Applicable; Other documentation may be required)

3. Name of Owner

Douglas Collender

Mailing Address

8 High Ridge Ct.  
Newark, DE 19711

Phone 302-354-4761

Email doug0852@comcast.net

☒ Same as Contact Person

<sup>1</sup> 26 Del. C. §352(11).

<sup>2</sup> 26 Del. C. §352 (6).

<sup>3</sup> Documentation will be required to substantiate import capabilities into PJM.

4. Name of Contact Person

Douglas Collender

Mailing Address

8 High Ridge Court  
Newark, DE 19711

Phone 302-354-4761

Email daug0852@comcast.net

5. Operational Characteristics: <sup>4</sup>

Fuel Types Used (check all that apply):

☐ Gas combustion from the anaerobic digestion of organic material

☐ Geothermal

☐ Ocean, wave or tidal actions, currents, or thermal differences

☐ Biomass

☐ Fuel Cells

☐ Hydroelectric

☐ Methane Gas captured from a landfill gas recovery system

☒ Solar

☐ Wind

\*If co-firing with fossil fuels, attach the allocation formula on file with PJM;  
co-fire start date \_\_\_\_\_

\*If multiple fuel types are utilized, attach the formula for computing the portion  
of output per fuel type

5a. Rated Capacity (in MW, not including battery storage)<sup>5</sup> 0.00975

5b. Generation Unit's Final Approved Interconnection Date 8/26/19

<sup>4</sup> 26 Del. C. §352(6).

<sup>5</sup> Behind the meter Solar capacity should be entered in MW DC.

6. Is the Applicant's Generation Unit customer-sited generation?<sup>6</sup>

☒ Yes      ☐ No

6a. Is the meter that measures generation a revenue grade meter?

☒ Yes      ☐ No

7. Is the Applicant's Generation Unit a community owned generating facility?<sup>7</sup>

☐ Yes      ☒ No

8. Does the Applicant's Generation Unit have battery storage?

☐ Yes      ☒ No

If Yes, please answer a.-c.

8a. Can the Generation Unit's renewable energy generation be metered prior to any battery storage?

☒ Yes      ☐ No

8b. What is the battery energy capacity in kWh? \_\_\_\_\_

8c. What is the battery charge/discharge rating in kW AC? \_\_\_\_\_

9. If the Applicant's installation is solar or wind sited in Delaware:

9a. Was the Generation Unit physically constructed or installed with a workforce that consists of at least 75% Delaware residents?

☐ Yes<sup>8</sup>      ☐ No

9b. Does the installing company employ, in total, a minimum of 75% workers who are Delaware residents?

☒ Yes<sup>8</sup>      ☐ No

---

<sup>6</sup> 26 Del. C. §352(4) - "Customer-sited Generation" means a generating unit that is interconnected on the end use customer's side of the retail electricity meter in such a manner that it displaces all or part of the metered consumption of the end-use customer.

<sup>7</sup> 26 Del. C. §1001(5) - "Community-owned Energy Generating Generation Unit" means a renewable energy generating Generation Unit that has multiple owners or customers who share the output of the generator, which may be located either as a stand-alone Generation Unit or behind the meter of a participating owner or customer. The Generation Unit shall be interconnected to the distribution system and operated in parallel with an electric distribution company's transmission and distribution facilities.

<sup>8</sup> If Yes, please attach supporting documentation (see page 6 for details). Please note, in order to qualify for the Labor/Workforce Bonus, at least one of the options (a. or b.) must be met.

KW Solar Solutions

Company Name of Installer

2444 Denny Rd

Bear, DE 19701

Address

Dale E. Wolf

Signature of Company Representative

Dale E. Wolf

Print Name of Company Representative

10. If the Applicant's installation is solar or wind sited in Delaware, is a minimum of 50% of the cost of the renewable energy equipment, inclusive of mounting components, manufactured in Delaware?

☐ Yes\*

☒ No

\_\_\_\_\_  
Company Name of Installer

\_\_\_\_\_  
Signature of Company Representative

\_\_\_\_\_  
Address

\_\_\_\_\_  
Print Name of Company Representative

\_\_\_\_\_  
Address

**\*If Yes, please attach the following documentation:**

- A copy of the supplier's invoice showing Delaware manufactured equipment with this facility identified
  - If the supplier's invoice shows only a coded Purchase Order (PO) number, a copy of the company's matching PO that includes the address where the materials were used/installed, must also be supplied
  - If using a master invoice, a record of the draws against the purchased quantity, on the master invoice, must show the address of each use and the quantity of material used

I, Dale E. Wolf (print name) hereby certify under penalty of perjury that

1. I have made reasonable inquiry, and the information contained in this Application is true and correct to the best of my knowledge, information and belief.
2. I am authorized to submit and execute this Application and to bind myself and/or my company to the representations contained herein.
3. I /my company agree(s) to comply with and be subject to the jurisdiction of the Public Service Commission of the State of Delaware for any matters arising out of my submission of this Application or the granting of the Application.
4. In the event that any of the information contained in this Application changes pending the consideration of this Application or after the Application is granted, I/my company will amend the Application to provide the Commission with such changed information.
5. I acknowledge that if any of the representations made in this Application or in any amendment thereto are found to be untrue when made, I/the company may be subject to sanctions, including but not limited to monetary fines and/or the revocation of any Certificate granted as a result of the representations made in this Application.

Signature: Dale E. Wolf

Date: 9/10/19

Company Name (if applicable): KW Solar Solutions

Position Title (if applicable): President

**Required Documentation:**

- If the Generation Unit is customer-sited generation, attach a copy of the utility's **Final Approved Interconnection Agreement**. The Agreement must include Generation Unit Address, Nameplate Capacity, and Interconnection Date.
- A copy of U.S. Department of Energy, Energy Information Administration Form EIA-860, if rated capacity is **>1.0 MW** and a copy of the **Final Approved Interconnection Agreement** including Generation Unit Address, Nameplate Capacity, and Interconnection Date.

## Documentation Required for Delaware Labor/Workforce Bonus

10. If the Applicant's installation is solar or wind sited in Delaware:

- Was the Generation Unit physically constructed or installed with a workforce that consists of at least 75% Delaware residents?
- Does the installing company employ, in total, a minimum of 75% workers who are Delaware residents?

If you answered yes to "a", list all employees used as direct labor (physical construction and installation) for this Generation Unit: (Attach additional sheets if necessary)

If you answered yes to "b", list EVERY employee on the payroll during the period from project start date until project completion date. Projects are considered complete upon final interconnection approval to operate: (Attach additional sheets if necessary)

KW Solar Solutions

Installation Company Name

Project Start Date: 8/7/19 Project Complete Date: 8/10/19

Employee Full Name	Home Address City, State Only (As per Tax Withholding)	Social Security Number (Last 2 digits Only)
Dale Wolf	Elkton, MD	96
Rob McGinty	Middletown, DE	47
Brian Lankford	Newark, DE	31
Bob Myers	Newark, DE	51

Total Delaware Resident Employees: 3 Total Number of Employees: 4

% of Delaware Residents (Delaware Residents Divided by Total Employees): 75%

**Municipality Generator Interconnection Application -Short Form**  
**Part II - Final As-Built Details**

A single customer interconnecting to a single meter at a single premise provides Final As-Built Details this date August 9, 2019 to the Municipality of Newark, to install and operate a generating facility interconnected with the Municipal's utility system.

**Section 9. Installation Details**

Generating System was installed by: ☐ Owner ☒ State Licensed Electrician

Installing Electrician: Bob Myers Firm: Myers Electric License No.: T2002382L

Mailing Address: P.O. Box 12

City: Newark State: DE Zip Code: 19715

Telephone: Area Code: 302 Number: 547-6914

Installation Completion Date: 8/13/19 Interconnection Date: 8/13/19  
(System connected but shall not be active/live.  
System not approved by Utility at this point.)

Supply certification that the generating system has been installed and inspected in compliance with the local Building/Electrical code of the municipality of Newark, DE

Signed (Inspector): \_\_\_\_\_ Date: \_\_\_\_\_  
(In lieu of signature of Inspector, a copy of the final inspection certificate may be attached)

**Generator Technical Information**

The applicant certifies that the system described below is the Final As-Built Design and does match any revised application submitted by the applicant and approved by the municipality prior to the interconnection date.

Generator Equipment and Operation Details (If multiple different products are used please detail)

Generator Manufacturer:	<u>Q Cell</u>
Generator Model Name:	<u>Q. Peak</u>
Generator Model Number:	<u>Duo 65.1 325</u>
Generator Output (kW):	<u>9.75</u>
Inverter Manufacturer:	<u>Solar Edge</u>
Inverter Model Name:	<u>Single Phase Inverter</u>
Inverter Model Number:	<u>SE 10000 H-US</u>
Inverter Power Rating (AC Watts):	<u>10,000</u>
Number of Inverters:	<u>1</u>



Inverter Efficiency %:	99.2
Intended Inverter Location:	Next to Meter
System Rated Output (Total Generator Output x Inverter Efficiency)	9.67
<b>If Generator is Photovoltaic include as well:</b>	
Module Power Rating (DC @ STC): Should match Generator Output (kW)	325
Number of Modules:	30
Total Solar Output kW (Modules x Power Rating DC @ STC):	9.75
Array Orientation (degrees): Note size of each array with different degrees.	181
Array Tilt (degrees): Note size of each array with different degrees.	28
<b>May be Required: Completed Generator Installation Pictures Attached. Must show whole generator, inverters, electric permits</b>	

### Section 10. Applicant Certifications

I hereby certify that, to the best of my knowledge, all the information provided in the Final As-Built Details is true and correct. I agree to install a Warning Label provided by the Municipality on or near my service meter location. I also agree to submit a new or revised Interconnection Application and comply with all governing permitting requirements before adding to in any way or subtract from in any way the current approved electric generating system; including but not limited to expanding, replacing, or removing all or a portion of the current system, adding a new generator type, and/or replacing in anyway the generator system inverter. I further agree to notify the utility in writing through official certified mail at least 30 days before I sell or transfer ownership of the system to another owner to allow the municipal electric utility to update records and determine if the new owner agrees to the generation and interconnection responsibilities associated with the transfer of ownership. A new property owner, of property that up until the time of sale had an approved Interconnection Agreement in place for net-metering, has 30 days to submit a new Interconnection Agreement for net-metering in his/her name. If the new owner fails to submit an Interconnection Agreement within 30 days of property transfer, certain net-metering transfer rights may be discontinued.

Failure for non-compliance to these certifications will be considered a violation of the net-metering agreement and may result in the disconnection of the electric generator at the discretion of the municipal electric utility. The sale or transfer of the electric generator shall not compromise law.

I further certify and understand that municipal utility review and approval of this application does not constitute an endorsement of actual equipment performance nor does it endorse its benefits or economics.

Signature of Applicant:

*Douglas Colender*

Date:

8/15/2019

Print Name:

DOUGLAS COLENDER

Call your municipal electric service to find out who should receive this Part II Interconnection Application. Make sure to include all application sections (9 - 12) with final submissions.

### Section 11. Final Approval or Non-Approval for Interconnection and System Operation

The Municipal Utility:



Approves



Approves w/Conditions



Does NOT Approve

The interconnection of a

SOLAR

generator as detailed in the Final As-Built Details and located

at (installation address)

8 High Ridge Court

The Municipal Utility has verified the applicant's average electric consumption in Appendix A. ☐ Yes ☐ No

The Municipal Utility has verified at the time of installation that the installed electric generator is designed to produce no more than 110% of the applicant's/customer's average annual electric consumption as calculated in Appendix A. ☒ Yes ☐ No

Signed (Municipal Utility):

*Sam Sneeringer*

Date:

8/26/19

Print Name & Title:

SAM SNEERINGER

DEPUTY ELECTRIC DIRECTOR

Approval with Conditions:

Reason of Not Approving: \_\_\_\_\_

Approval to connect to the municipal system indicates only that the minimum requirements for a safe proper interconnection have been satisfied. Such approval does not imply that the Generator Owner's facility meets all federal, state and local standards or regulations.

**Section 12. Municipal Internal Notifications**

- Send Applicant Warning Label for installing on/ near service meter: ☒ Yes
- Notify Billing Dept. of Interconnected Generation: ☒ Yes
- Notify District Engineering of Interconnected Generation: ☒ Yes
- Notify System Protection of Interconnected Generation: ☒ Yes
- Notify Municipal Building Department: ☒ Yes
- A copy of the approved Part II Final As-Built Details must be sent to the Delaware Municipal Electric Corporation ("DEMEC"). ☒ Yes

**DEMEC**  
**P.O. Box 310**  
**Smyrna, DE 19977**



## AMERICAN INSPECTION AGENCY, INC.

Approval is issued after completion of visual / final inspection in accordance with the National Electric Code (NFPA 70) applicable governmental, utility, and/or any state or local amendments there to.

### CERTIFICATE OF INSPECTION

Date:	August 13, 2019
Owner:	Douglas Collender
Occupant:	Dwelling
Location:	8 High Ridge Court, Newark, DE
Type of Occupancy:	Single Family
Installed By:	KW Solar Solutions
Equipment:	9.75 KW Solar Associated Electric

This certificate applies to the electrical wiring to the electrical equipment listed above and/or on application along with the installation inspected as of the above noted date based on visual inspection. Should the electrical system to which this certificate applies be altered or changed in anyway, including but not limited to the introduction of additional electrical equipment and/or the replacement of the components installed as of the above noted date, this certificate shall be immediately null and void. This certificate applies only to the use, occupancy and ownership as indicated herein. Upon a change in the use, occupancy or ownership of the property indicated above, the certificate shall be immediately null and void. No warranty is expressed or implied as to the mechanical safety. This certificate shall be valid for a period of one year from the above noted date.